# trans-5-Ethylidene-bicyclo[2.2.1]hept-2-ene

**Inchi:** InChI=1S/C9H12/c1-2-8-5-7-3-4-9(8)6-7/h2-4,7,9H,5-6H2,1H3/b8-2+
**InchiKey:** OJOWICOBYCXEKR-KRXBUXKQSA-N
**Formula:** C9H12
**SMILES:** CC=C1CC2C=CC1C2
**Mol. weight [g/mol]:** 120.19
**CAS:** 28304-67-8

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| chl | -5363.10 ± 1.80 | kJ/mol | NIST Webbook |
| gf | 209.72 | kJ/mol | Joback Method |
| hf | 150.40 ± 2.00 | kJ/mol | NIST Webbook |
| hfl | 106.50 ± 1.80 | kJ/mol | NIST Webbook |
| hfus | 14.78 | kJ/mol | Joback Method |
| hvap | 43.90 | kJ/mol | NIST Webbook |
| log10ws | -2.60 | | Crippen Method |
| logp | 2.529 | | Crippen Method |
| mcvol | 107.350 | ml/mol | McGowan Method |
| pc | 3333.53 | kPa | Joback Method |
| tb | 428.87 | K | Joback Method |
| tc | 638.10 | K | Joback Method |
| tf | 234.67 | K | Joback Method |
| vc | 0.414 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 295.25 | J/mol×K | 638.10 | Joback Method |
| cpg | 215.63 | J/mol×K | 428.87 | Joback Method |
| cpg | 231.35 | J/mol×K | 463.74 | Joback Method |
| cpg | 246.00 | J/mol×K | 498.61 | Joback Method |
| cpg | 259.64 | J/mol×K | 533.49 | Joback Method |
| cpg | 272.35 | J/mol×K | 568.36 | Joback Method |
| cpg | 284.20 | J/mol×K | 603.23 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0004759 | Pa×s | 428.87 | Joback Method |
| dvisc | 0.0006149 | Pa×s | 234.67 | Joback Method |
| dvisc | 0.0005742 | Pa×s | 267.04 | Joback Method |
| dvisc | 0.0005441 | Pa×s | 299.40 | Joback Method |
| dvisc | 0.0005211 | Pa×s | 331.77 | Joback Method |
| dvisc | 0.0005029 | Pa×s | 364.14 | Joback Method |
| dvisc | 0.0004881 | Pa×s | 396.50 | Joback Method |
| hvapt | 41.20 | kJ/mol | 381.00 | NIST Webbook |

# Sources

**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws
**Joback Method:** https://en.wikipedia.org/wiki/Joback_method
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C28304678&Units=SI

# Legend

**chl:** Standard liquid enthalpy of combustion
**cpg:** Ideal gas heat capacity
**dvisc:** Dynamic viscosity
**gf:** Standard Gibbs free energy of formation
**hf:** Enthalpy of formation at standard conditions
**hfl:** Liquid phase enthalpy of formation at standard conditions
**hfus:** Enthalpy of fusion at standard conditions
**hvap:** Enthalpy of vaporization at standard conditions
**hvapt:** Enthalpy of vaporization at a given temperature
**log10ws:** Log10 of Water solubility in mol/l
**logp:** Octanol/Water partition coefficient
**mcvol:** McGowan's characteristic volume
**pc:** Critical Pressure
**tb:** Normal Boiling Point Temperature
**tc:** Critical Temperature
**tf:** Normal melting (fusion) point
**vc:** Critical Volume

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